

HEADQUARTERS
DIRECTORATE OF CIVIL WORKS &
DIRECTORATE OF MILITARY PROGRAMS

ENGINEERING & CONSTRUCTION NEWS

VOLUME 1 NUMBER 4 APRIL 1999

APRIL'S THEME:



DWIGHT'S NOTES

The theme of this month's newsletter is safety. My message to you is that "we are all in the safety business." Safety is one of the few responsibilities inherent to all people and organizations. On a personal level we all expect a working environment where the risks of personal injury are known and effective measures are in place to mitigate these risks. You will note that I didn't say "eliminate" risks. Safety is all about managing risk. The work of the Corps ranges from high risk-activities (i.e. diving)



to lower risk office work. Our contractors are also exposed to a wide spectrum of occupational and site specific risks. Visitors to our recreation projects are exposed to hazards and level of risk different than their home or workplace. It is our job as public servants, supervisors, or co-workers to raise the awareness level of hazards and to implement training and other measures to effectively avoid them.

I once investigated an on-the-job fatality of a young Corps employee (a courier) resulting from a traffic accident on Germany's Autobahn. On the surface the accident could be described as one of those occasional unfortunate incidents that "goes with" driving. I found, instead, some systemic problems in hiring and training practices for professional drivers in Europe. The risks in the driving environment of Europe were not managed to the extent that the government could effectively screen out drivers susceptible to accidents or provide the training to raise their awareness of these risks to the extent that it affected their driving behavior.

On another occasion, a Corps contractor was electrocuted on one of our project: one of the projects in my district. The fatality resulted for a series of job-site events and subsequent mistakes by the contractor's employee. Had any one of these conditions been absent from the situation the accident would not have occurred. In this case the risks were well known (high-voltage electrical distribution work), but the safeguards were insufficient and the employee was complacent in his work habits.

Most lost-time injuries and job-site fatalities have story lines like those above. We find that had we been aware, had we provided the systemic tools (training, safety stand-downs, etc.), and had we and our contractors remained diligent in managing safety risks, these accidents were avoidable.

In 1998 the Corps received the Chief of Staff of the Army's Major Command Safety Award. During all of 1998 not one Corps employee suffered a normal duty-time fatality. Contractor lost-time accidents and fatalities were exceedingly low. We can be proud of that achievement. We worked hard at it. 1999 is not going well, though. Four contractor and one Corps employees have died on-the-job in the last six months. Contractor lost-time accident rates are 11% higher than the first two quarters of 1998. The hazards and level of risk have not increased. We are still in the same businesses. In time, accident investigations will reveal the particular lessons learned. But the overall message is already clear. We must redouble our safety efforts with our employees, our contractors, and our users. Spring and summer are the seasons with the highest volume of construction and the largest number of

DWIGHT'S NOTES (CONTINUED)



recreation visitations. With this increased activity comes a higher exposure to hazards and an increased risk of injury. Please fulfill your personal responsibility to make our offices, our job-sites, and our recreation projects accident-free this spring and summer. It could become a life or death matter.

CARL'S NOTES

Several of you asked me what it is like being at Headquarters. To help answer that question and at the same time give you a sampling of what is going on around the Corps, I will describe my month of March.

I started the month with a visit to South Atlantic Division, Herbert Hoover Dike at Lake Okeechobee, Florida, the South Florida Water Management study area including the Everglades and several projects in Puerto Rico including a trip to the construction site of the Corps first thin arch dam at Ponce. In-house personnel from around the Corps are accomplishing Portguges Dam's grouting program as a training opportunity. The second week included my participation in a meeting with the Corporate Outreach Focus Group in Arlington, Texas and attendance at the Mississippi Valley Division's Board of Directors meeting. MG Anderson's BOD was reporting out on several innovative initiatives that improve organizations and processes. The division had completed action on five Process Action Team studies. The studies included review of Dam Safety inspections, Water Control data collection, Contracting regionalization, Real Estate acquisition regionalization, and Mississippi River and Tributaries budgeting priorities. While in Vicksburg I toured the Tri-Service CADD/GIS Technology Center at the Waterways Experiment Station with Dr. Radhakrishnan and Harold Smith and observed many state-of-the-art tools at the Information Technology Laboratory. The third week of the month I was in Washington participating in a workshop developing the Department of Agriculture account plan. Participating from the field were Joe Tavares (Jacksonville), Ron White (Walla Walla), and Alexandra Crawford (Baltimore). Also that week Dwight and I hosted a "Kitchen Cabinet" meeting with a group of Division and District representatives discussing Engineering strategies for the future (see related article later in this issue). The field personnel included Ed Middleton (Jacksonville), Phil O'Dell (Seattle), Eugene Tickner (New Orleans), Joe Rogers (Savannah), Paul Robinson (Great Lakes and Ohio River), Lloyd Caldwell (Baltimore), and Carl Postlewate (South Atlantic). This was an extremely productive means of getting field input on mutual items of interest which we will continue to do in the future with a changing list of invitees. The fourth week of March included a coast-to-coast speaking engagement. Starting on Monday in Las Vegas with a Beranek/Enson presentation to the American General Contractors (AGC) conference on "Alliancing and Partnering" and ending on Friday with a presentation on Amelia Island, Florida, to the American Concrete Pipe Association (ACPA). The message to ACPA was a focus on the Nation's aging infrastructure. The middle of that week was spent in St. Louis at the Environmental, Engineering, and Construction conference where I met and talked with a large number of our engineering and construction personnel from across the country. I finished the month participating in a selection panel with MG Sinn for the Chief of E&C in Philadelphia District.

At the conference in St. Louis, I discussed "Excellence in Engineering" and Dwight's and my commitment to defining this for the Corps. Let me first say we are using the word "engineer" in the broadest sense. Second, we must be committed to Excellence as part of the Project Management Business Process. As we move forward in developing our plan for "Excellence" there are a few things we know now that will pay dividends. On the organizational side all members of the Corps family

CARL'S NOTES (CONTINUED)

must champion the Corps technical capabilities. Our organizations must become more flexible and willing to use resources from other Districts, from the CTX's and laboratories, and to use new technology. Also we need to develop a Corps-wide program to help replace lost talent. On the personnel side we must promote professional development, encourage involvement in professional organizations, and promote professional registration of all engineers, as well as other disciplines. In times of constrained budgets we must not forget the long-term value of continuing education. As I said these are some obvious things we must continue to focus upon. As we move forward defining our "Engineering Excellence" concept your thoughts and ideas are needed. Don Dressler is our POC. More to come.

April is the first full month of spring. The construction and outdoor recreation season will be getting in full swing. I encourage each of you to hold in-house safety meetings with your personnel and discuss some of the warm weather safety concerns that may have been forgotten over the winter.

Sharing information is becoming more critical in our Visions "corporate culture". The ability to manage that information efficiently and effectively will be what differentiates us from other organizations. To that end, Dwight and I have started an active program to encourage engineers from the Districts and Divisions to provide articles for these notes sharing the great ideas and innovations each of you have. We must become better at disseminating successes as well as adopting such good ideas in places where they weren't invented. Each Division Director of Engineering and Technical Services has received a message requesting articles. While we will be highlighting a subject and a Division each month, I encourage you to submit articles on any timely subject at any time.

ARTICLES

SAFETY

OSHA Developing More Safety and Health Tools

Dam Safety – It's Safety Our Constituency Can Live With

Celebrate Safety

UPDATE

Engineer Inspector General (EIG) Report – Program and Project Management

Supervision and Administration (S&A) Study

Resident Management System

TECHNICAL

Carbon Monoxide Alarms

National Inventory of Dams is On-line

Gas Piping Systems

Landslides in Honduras

INFORMATION

Engineering and Construction Quality Management

Professional Registration of Architect-Engineer Personnel

Civil Works Guidance Publications

Value Engineering Studies Provide Safer Alternatives to Disposal

Private Sector Contracting

Augmenting S&A Staff

TRAINING

Construction Quality Management for Contractors

Mechanical Systems Commissioning

Engineering and Design Quality Management Course

CP-18 Leadership Development Program

MEETINGS AND CONFERENCES

Joint Environmental, Engineering and Construction Conference

"Kitchen Cabinet" Meeting

PARTNERING

USACE-MAPPS Partnering Meeting

Meeting with Association of State Geologists

THIS PUBLICATION WILL BE ISSUED ON A MONTHLY BASIS AND DISTRIBUTED BY E-MAIL AND POSTED ON THE INTERNET AT http://www.hq.usace.army.mil/cemp/c/cemp-c.htm and

HTTP://www.usace.army.mil/inet/functions/cw. If you would like to contribute articles or have suggestions for future articles, please contact Denise Massihi, CEMP-EC, 2020-761-1380 or Charles Pearre, CECW-EP, 202-761-4531.

EDITOR'S CORRECTION NOTE

In the March issue of these notes, COL Robert Crear was incorrectly listed as the Commander of the Kansas City District. COL Crear is the Vicksburg District Commander.

POC: CHARLES PEARRE, CECW-EP, 202-761-4531



OSHA DEVELOPING MORE SAFETY AND HEALTH TOOLS

The Occupational Safety and Health Administration (OSHA) continues to develop electronic and eventually web-enabled tools that complement existing written materials and provide additional assistance and guidance to occupational safety and health professionals. The Hazard Awareness Advisor is the latest addition to the OSHA line of interactive software advisors.

The Hazard Awareness Advisor is designed to help employers and employees, locate potential hazards in their specific work environments. The program asks users for specific information about their activities, practices, policies, materials, and equipment and then identifies hazards that may be present. The software then prepares a customized report that briefly describes the likely hazards for that particular business and sources of assistance and guidance.

The program is not a substitute for seeking the assistance of qualified safety and health professionals. It is merely an introduction to hazard recognition. By making this "beta" version available, OSHA now hopes to get more suggestions for later versions. Access the OSHA Hazard Awareness Advisor at http://www.osha.gov/oshasoft/.

If you have any comments or suggestions regarding the OSHA Advisors please forward them to you Safety and Occupational Health Office.

Other software advisors available on OSHA's Web site are:

- Lead in Construction
- Safety Pays
- Fire Safety
- Confined Space
- Asbestos
- GOCAD (Cadmium Standard Biological Monitoring Advisor)

POC: ROBERT STOUT, CESO, 202-761-8566

DAM SAFETY - IT'S SAFETY OUR CONSTITUENCY CAN LIVE WITH

The Corps provides critical support to the nation's water resources infrastructure with its robust dam safety program. Dams offer us an opportunity to harness water for a wide variety of purposes including flood control, water supply, navigation, hydroelectric power, water quality, recreation, and fish and wildlife conservation. Dams also present a unique challenge and responsibility because of the enormous potential energy of the water stored behind them; for this reason, our commitment to dam safety remains second to none. With our blend of unequalled technical expertise and contract capability, we ensure the safety of our own 570 Civil Works dams and the 218 Army dams, and we work cooperatively with the Navy and Air Force to contribute to the success of their dam safety programs. Additionally, as the DOD representative of ICODS (the Interagency Committee on Dam Safety), we share our resources, experience, and technical expertise to improve the state of dam safety in the nation.

POC: ROBERT BANK, CECW-EP, 202-761-1660

Return to Index of Articles

CELEBRATE SAFETY

Throughout the 1970's and 1980's, Mobile District's Construction Division nearly always met the established USACE safety goals. However, a trench cave-in fatality and several other near misses in the early 1990's provided a wake-up call that improvements were needed in the District's Safety program.

In response to this need, Paul Tucker, Chief of Construction Division, formed a committee of field personnel to formulate recommended solutions. His only guidance to the committee was Construction Division's Safety Philosophy – all accidents are preventable and safety requirements are **not negotiable**. It did not take the committee long to determine that in this era of constrained budgets and limited personnel, the best way to improve the safety program was to enter into a partnership with our construction contractors. With this theory as the guiding principle, "Celebrate Safety" was born.

The "Celebrate Safety" program runs on an annual basis, coinciding with the fiscal year. At the end of each quarter, the field offices review their projects and nominate their best contractor for the district "Safe Contractor of the Quarter" in each of three categories, based on project size: Large (>\$5 million), Medium (\$1-5 million) and Small (<\$1 million). There are also two additional categories for the district's Latin America projects. The contractors are evaluated by the Safety Review Board, consisting of a representative from each area office, the safety office, and a contractor representative, and chaired by a Resident Engineer. Members serve on the board for 2 years on a rotational basis. The board reviews the following aspects of each contractor's safety program: management involvement and planning, complexity and hazards associated with the project, innovation in Safety program, subcontractor involvement and participation, employee involvement and participation, and incentive programs.

The contractors selected as the Quarterly district winners are awarded a plaque and receive a letter from the District Engineer that is forwarded to their bonding company and insurance company. The quarterly winners then become eligible for the annual Safe Contractor of the Year Award which is presented at the Celebrate Safety Workshop and Banquet held at the end of each year. All local winners receive a certificate, and the Project Engineers on winning projects receive an On-The-Spot cash award. It is most gratifying to see the enthusiasm and energy level of both contractors and district field personnel, all proud to have "bragging rights" for their safety records.

The program has expanded over the years to include awards for completing a contract with zero lost-time accidents, reaching one million man-hours worked with no lost-time accidents and awards for subcontractors.

ENGINEERING & CONSTRUCTION NEWS APRIL 1999

CELEBRATE SAFETY (CONTINUED)

The results of the program have been dramatic. In the seven years since the program's inception, Mobile has seen a steady decline in lost-time accidents. The district completed FY97 and FY98 with lost-workday injury frequency rates of .18 and .12, respectively, compared to the Corpswide rates of .61 and .63. This results in the accomplishment of nearly 4 million contractor man-hours per year being performed 3 to 5 times "safer" than the Corps average. The improvement in Mobile's safety record corresponds to a steady increase in active participation by both contractors and Government employees. Mr. Tucker attributes the success of the program to the fact that field personnel at the grass-roots level developed the concept. For more information on the "Celebrate Safety" program, contact Paul Tucker or Alan Bugg at the Mobile District.

POC: PAUL TUCKER, CESAM-CD, 334-690-2471

Return to Index of Articles



ENGINEER INSPECTOR GENERAL (EIG) REPORT -- PROGRAM AND PROJECT MANAGEMENT

In December 1997, the Chief directed the Engineer Inspector General (EIG) to conduct a systemic inspection to determine the organization's commitment to the goals and objectives of the Program and Project Management Business Process (PMBP) described in ER 5-1-11.

The Chief approved the EIG Inspection Report on 11 February 1999, with the following comment: "This is an outstanding report! The EIG has clearly captured my intent for Project Management. PPM is the process we will use to do our work. "Teamwork" is the Key! I expect all leaders and anyone involved with PPM to read this report."

That is a rather strong endorsement from the Chief. And, as the PPM process is the process by which we do all our work, literally, everyone in the organization should read the report to better understand how what they do fits within the PMBP. At the present time, many of us are struggling with interpreting our respective roles under this new process.

ER 5-1-11 is intentionally less directive than previous regulations to allow organizations to develop their business practices based on their unique requirements, while staying within the framework of the Program and Project Management Business Process. Unfortunately, the regulation's flexibility has caused some confusion in the implementation of the PMBP. For organizations that understand the intent of the PMBP, the regulation contains sufficient guidance and direction. Conversely, those organizations that do not understand the PMBP can use the vagueness in the regulation to justify practices that are not consistent with the PMBP. **Organizations practicing inconsistent processes were interpreting the regulation relative to the existing culture without grasping the implications of their actions**. The intent of the regulation was to allow for flexibility of implementation procedures, not to allow room for interpretation of the most basic tenets of the program.

The EIG visited a representative number of offices and made some general observations as to the overall commitment to Program and Project Management Business Process (PMBP). Although there is almost universal acceptance of the PMBP, the real philosophy of the PMBP was, for the most part, not translated into a true application of the process. **The objectives of PMBP will never be consistently achieved without an organization-wide understanding of the process.**

In the organizations that have made the greatest progress towards implementation of the PMBP, the EIG found that the Program and Project Management organization is not viewed as a "stovepipe". There is a true focus on PMBP process, and the entire workforce is educated to the requirements. The emphasis is on teamwork and the entire team is formed early. There is a clear empowerment of the PM

ENGINEER INSPECTOR GENERAL (EIG) REPORT (CONTINUED)

and the entire team to get the job done. Commitments are scheduled and kept, and internal assessments are conducted. The DPM is clearly the senior civilian, and Project Review Boards (PRB's) are considered important to the management of all projects and programs. The more successful PRB's include pre-PRB coordination meetings that address all projects; assess Project baselines; and provide for Project Briefings by exception.

The EIG made recommendations on what must be accomplished for the PMBP to be applied consistently throughout USACE. The most significant recommendation addresses the extent of misunderstanding of the PMBP in the Corps. It stresses the need for continued emphasis on educating the organization on the PMBP. Also, it was recommended that additional guidance be developed concerning the roles of program managers and determining how the laboratories should apply the PMBP. Furthermore, issues dealing with the application and support of the PMBP at HQUSACE are to be addressed by a review of policies and procedures to ensure they are consistent with the PMBP. Teams have been formed to address these recommendations and this ongoing process should help all of us to better understand that all programs and activities in the organization follow a common process under the PMBP. And that "Teamwork" is the Key! to our success.

POC: JERRY SAVAGE, CECW-BD, 202-761-8589

Return to Index of Articles

SUPERVISION AND ADMINISTRATION (S&A) STUDY

We are moving forward with our S&A study. The objectives of this study are to *improve the efficiency, effectiveness, and customer satisfaction* of the Construction Management S&A process. We have visited four districts—Louisville, Omaha, Seattle, and Jacksonville. Recently we presented preliminary findings and recommendations to the construction folks at the St. Louis conference in late March. We also took the time to visit some of our DPW, BCE, and CW customers for their feedback on what's not and what is important to them in the S&A Construction Management area. We've categorized our findings in five areas — workforce, process improvements, project delivery, financial practices, and S&A service packaging alternatives.

On April 8, 1999, the S&A Working Committee (WC) met to review the recommendations and determine which of them should be moved forward to the Executive Steering Committee (ESC) for review and eventually to you, the field, and HQ staff for feedback. The next and final step would be to implement those S&A recommendations that made it through this strategic review and are staffed through the stakeholders at HQUSACE. We see implementation in two phases – those that can be executed before FY00 and those which will be executed during FY00. While a lot of hours have been expended to get us where we are (e.g., 4 district visits, customer visits, and much analysis, etc.), there is no doubt in our minds that there are still some good ideas with big payback which we have not addressed. As we dissiminate these recommendations to you, through your MSC's, please take the time to review them and tell us what we've missed. (Thought for the Day – "Good Judgement Comes from Experience – Experience Comes from Bad Judgement)

POC: PETE ALMQUIST, CEMP-EC, 202-761-1258

RESIDENT MANAGEMENT SYSTEM

On October 1, 1998, MG Genetti approved the start of deployment for the first phase of RMS for Windows in USACE. RMS for Windows has since been deployed to several locations throughout SPD and SWD. Several enhancements have also been added to the software, and the goals set by HQUSACE (for initial deployment in all Division Commands during Calendar Year 1999) should be achieved. The WINRMS web site is used to post the most current RMS Windows Deployment

RESIDENT MANAGEMENT SYSTEM (CONTINUED)

Schedule and can be viewed at: http://winrms.usace.army.mil

As many of you already know, RMS DOS from its inception in the 1980's has been managed on a part time basis with the help of many government volunteers from construction offices across the Corps of Engineers. HQUSACE made a decision last year to establish a full time government Project Management position to manage the overall development and deployment of RMS for Windows. Likewise, additional government functions have been established and funded via HQUSACE to support the overall effort. The key positions associated with these efforts include:

- a. *RMS Project Manager* This position which was advertised last month is expected to be filled in April 1999. This will be a full-time position, as opposed to the prior "dual-hat" position of a RMS Development Manager and Resident Engineer which is currently held by *Mr. Haskell Barker*, the Resident Engineer at the CESPL Fort Irwin Resident Office.
- b. *Director of Training* A lead instructor for RMS DOS (*Mr. Fred Freeman*, Resident Engineer, CESPL) has been detailed full-time to this position for the duration of all phases of deployment of RMS for Windows. Fred has arranged for a centralized training site to be used for the RMS Windows "Train the Trainer" activities, and for training field office personnel from all MSCs. The centralized RMS Windows training will commence in May 1999, in facilities at the Fort Worth District Office. Various volunteers have been identified to assist the RMS Center in the initial stage of deployment and training for RMS for Windows. The trainers are all "power" RMS DOS users and very knowledgeable in Contract Administration requirements as well as the RMS programs. These volunteers are *Mr. Jack Pennington* and *Mr. Larry Smith* of CESPK; Ms. *Judy Kay Steiger* of CESWF; *Ms. Carol Bianchi* of CESWT; *Mr. Art Stoddard*, *Mr. Dan Moore* and *Mr. Harland Kroll* of CESPL.
- c. A co-developer/programmer of RMS DOS (*Mr. Jack Pennington*, CESPK) has been detailed approximately half time to review and evaluate programming code developed by contractor personnel, and to convert and program the RMS DOS "Correspondence", "Mod Documents", "Project Plans" and "Resident Plans" modules for the RMS for Windows program. Jack has also developed the "replication" features of the Windows version of RMS.
- d. An Assistant writer of the RMS DOS manual (*Ms. Carol Bianchi*, CESWT) has been hired to update the RMS DOS manual to the current RMS for Windows program. It is expected that the *RMS Windows Manual* will be complete and ready to post on the Web page not later than 1May 1999.

The conversion of the stand-alone DOS version of RMS to a Windows client/server Oracle version is a major programming task in itself. The software development and support remains an important activity during deployment as refinements and fixes are made, based on user input. However, deployment coordination and support activities now become the prime, critical activity for the RMS Center. Accordingly, two separate contractor teams have been established at the RMS Support Center. One team will be responsible for Development, Maintenance, and QA Testing of the RMS Windows software. The other team will be responsible for the RMS for Windows software deployment, QC Testing, documentation and the Help Desk (User Support).

- a. A *RMS Development and Maintenance Team* will be established with a separately designated team leader. Contractor personnel assigned to this team will be responsible for developing and maintaining program modules and pre-testing all modules prior to release to the deployment team for QA testing.
- b. A *RMS Deployment & User Support Team* will be established with a separately designated team leader. Contractor personnel assigned to this RMS Deployment & User Support Team will support all activities relating to RMS deployment, including assisting Information Management personnel developing District-level RMS for Windows installation configuration plans, installing Oracle DBMS, DBA support, technical RMS training for IM staff, User hotline support, communication issues, and system documentation.

RESIDENT MANAGEMENT SYSTEM (CONTINUED)

c. Two new high-level lead programmer contractor positions have been established to manage each of the separate teams. These positions require professional programmers with a Bachelor of Science degree in computer science and extensive experience in systems design and development. The contractor has submitted qualified applicants for both of these positions. One of these new positions is being filled with the programmer (*Mr. Eric Holland*) who developed the RMS DOS version that is currently in use. He also has been designated as the overall Task Leader responsible for deliverables from both of the separate teams. The other lead programmer position is being evaluated and will be filled as soon as possible.

Due to the changes in management and personnel of this GSA contract, RMS users will experience a change in the person(s) assigned to assist with both the RMS DOS and the RMS for Windows versions of the program. For example, *Mr. Ken LeBlanc* has assisted many users in the past. However, he has been assigned to the Development Team and will no longer be fielding user questions and problems via the Help Desk or NetMeeting. The newly designated person for user support is *Ms. Noelle Panczel*. She is on the Deployment Team and many of you in the field have already met her face-to-face, as she has traveled extensively installing the Oracle/RMS software at various SWD and SPD locations. RMS Windows developer, *Mr. Richard Earley*, has accepted a programming position with another firm. All the efforts and accomplishments Rick have contributed to the RMS Windows effort is greatly appreciated, and USACE wishes him the best in his new position. Cooperation and understanding are needed as the RMS Support Center transitions to this new configuration, roles, and personnel.

A RMS Configuration Control Process and Board that will systematically collect, document, evaluate, schedule, and implement significant changes and enhancements to the RMS technology, functionality, and configuration is currently in the process of being established. Specific information on this process will be issued late in May 1999. HQUSACE is also revising the official RMS deployment plans and plans to issue these to MSCs in late April.

POC: DODY MARTELINO, CEMP-EC, 202-761-0636

Return to Index of Articles



CARBON MONOXIDE ALARMS

Carbon monoxide (CO) is an invisible, odorless, poisonous gas that is the number one cause of poisoning deaths in the United States. According to the Journal of the American Medical Association, unintentional CO poisoning causes approximately 2000 deaths and more than 10,000 injuries in the U.S. each year. In November 1998, the Navy lost four members of a family due to CO poisoning. CO can be produced from any fuel-burning appliance that is malfunctioning such as furnaces, gas ranges/stoves, gas dryers and water heaters. CO can also be produced from fireplaces and wood burning stoves, from vehicles running in an attached garage (even when an outside door is open), from blocked chimneys or flues, and from back drafting. Symptoms of CO poisoning are similar to the flu with no fever. They include dizziness, headache, nausea, fatigue, irregular breathing and confusion.

HQUSACE is issuing new criteria which will required carbon monoxide alarms in new family housing and renovated family housing that are equipped with a fuel burning appliance inside of the unit, or a fireplace, or an attached garage. Criteria should be issued about the time this newsletter is issued. Alarms for existing housing which are not undergoing major renovations will be addressed by ACSIM in the near future. Criteria for new construction will be issued in EIRS Bulletin 99-01 and will be incorporated into Technical Instructions (TI) 801-02, *Family Housing*.

POC: ROBERT DIANGELO, CEMP-ET, 202-761-4803

NATIONAL INVENTORY OF DAMS IS ON-LINE

The National Inventory of Dams (NID) is the comprehensive source of information on dams in the U.S. that meet the legislative definition of a dam (minimum size, or significant and high hazard potential classification). Our Topographic Engineering Center is currently putting the finishing touches on the 1998-1999 version, which currently contains over 78,000 dams. The new NID web site allows you to obtain NID data by query on individual or groups of dams. The data can also be downloaded. Future development will include GIS-based graphical access to the data. You can visit the NID web site at: http://www.tec.army.mil/Programs. The user must then click on National Inventory of Dams; currently highlighted with a "new star" and listed first.

POC: ROBERT BANK, CECW-EP, 202-761-1660

Return to Index of Articles

GAS PIPING SYSTEMS

Earthquakes can cause damage to the natural gas piping system inside buildings and subsequent leaking of the explosive gas. The gas distribution guide specification (CEGS 02556) has recently been revised to include criteria for earthquake-activated automatic gas shutoff systems. When an earthquake occurs, the system activates a shutoff valve which stops gas flow to a facility. These shutoff systems are now required installation in facilities being constructed in earthquake-prone areas.

POC: DALE OTTERNESS, PE, CEMP-ET, 202-761-8621

Return to Index of Articles

LANDSLIDES IN HONDURAS

Mr. Mike Klosterman, CECW-EG, is working with the Office of Interagency and International Affairs, CECW-I, as their technical advisor on the USACE effort in Central America to remediate landslides spawned by Hurricane Mitch. Geotechnical personnel from the Mobile District and WES have been in Central America since the hurricane struck and continue to provide technical advice to Central American governments. Landslide remediation is planned in two phases: the first to stabilize existing slides before the rainy season begins in May; the second to provide long term analysis, mitigation, and remediation of landslide threats.

POC: MIKE KLOSTERMAN, CECW-EG, 202-761-8682

Return to Index of Articles

Information

ENGINEERING AND CONSTRUCTION QUALITY MANAGEMENT

Quality management of design and construction products is part of the integrated product delivery process employed by the Corps of Engineers. It is the intent that USACE employ a management system that makes the entire USACE entity a project management oriented organization focused on business processes that are uniform throughout the command. The organizational responsibilities as they relate to engineering and construction quality management must be in compliance with ER 5-1-11, Program and Project Management. HQUSACE does policy oversight of the Major Subordinate Commands (MSC's). The MSC's act as an extension of HQUSACE and are primarily responsible for performing a quality assurance role in evaluating the effectiveness of their districts procedures in assuring delivery of a quality product. This means that the MSC's must now perform the DCE type inspections that use to be conducted by HQUSACE. The district has an engineering quality control and a quality assurance role depending on whether they are performing design with in-house assets or if the design is being done by A/E. The district has a quality assurance role during construction as the construction contractor is responsible for quality control.

ENGINEERING & CONSTRUCTION NEWS APRIL 1999

ENGINEERING AND CONSTRUCTION QUALITY MANAGEMENT (CONTINUED)

HEADQUARTERS ROLE - OVERSIGHT

HQUSACE shall evaluate Major Subordinate Commands (MSC) for application of an effective engineering and construction quality management system. This shall be accomplished during the Command Staff Inspection of the MSC. Reviewing the district's QA/QC efforts will validate HQUSACE findings at the division.

MSC ROLE - QUALITY ASSURANCE (QA)

The MSC's as an extension of HQUSACE are primarily responsible for executing a quality assurance role. General Ballard's Memorandum, dated 9 June 1998, Subject: MSC Quality Assurance Responsibilities details the "above the line" areas of responsibility the MSC must perform. These areas are:

- 1. **MSC Quality Management Plan** Develop and Maintain. Each MSC must develop a Quality Management Plan (QMP) that outlines the policies and procedures that all functional areas within the MSC will follow for their QA activities.
- 2. **District Quality Management Plan** Review and Concur. The MSC must review and concur with the district prepared QMP, which outlines the policies, procedures and responsibilities of all functional areas for producing quality products and services. This responsibility covers both district in-house design work, A/E contracted work and construction contracts.
- 3. **Quality Control Plans Approve/Monitor**. They must review and approve districts Civil Works Quality Control Plans (QCP) for decision and implementation documents. This is to insure compliance with QCP's by periodically verifying the independence of technical review (ITR), resolution of comments, documentation, etc. The MSC must oversee the district QA role when they conduct QA activities for A/E design work and other contracted products. This also includes oversight of the district QA plan for monitoring construction contractors Quality Control Plans.
- 4. **District Quality Process** Audit and Report. Review districts products for QC Process Evaluation. This includes meeting periodically with districts to review their quality control processes through evaluation of selected products and services at various stages of development to assure compliance with the QMP. Feedback to the district on these quality assessment audits is essential for district process improvement. This feedback should also be provided to HQUSACE so lessons learned can be distributed throughout the Corps.
- 5. **Command and Staff Inspections** Command and Control. Examine mission execution, level of training, FTE resources, workload, compliance with standards and regulations and obtain feedback on morale, welfare, discipline and problems/needs.

DISTRICT ROLE - QUALITY CONTROL/QUALITY ASSURANCE.

Within the USACE lines of responsibility, the district has the major quality control/quality assurance role. The district is responsible for insuring that the end product and service conforms to documented requirements. That role includes quality control of in-house designs and quality assurance of all contracted services to include A/E designs and construction contracts. To meet these quality goals the district must prepare a QMP. This plan must state their quality objectives, describes the organizational structure and interrelationship between the functional elements to assure that product quality is managed throughout the organization. It must reference procedures to be followed, work instructions and required records needed to assure a quality product. Quality control plans and quality assurance plans must be developed for specific products and these become a part of the overall quality management plan. These plans shall describe how quality will be managed for specific products, and

ENGINEERING AND CONSTRUCTION QUALITY MANAGEMENT (CONTINUED)

incorporated in product specific plans agreements with the customer as to functional, technical, aesthetic and environmental product requirement as well as lines of communications, schedules and budgets that are responsive, reasonable and attainable.

There has been little change in the district role in obtaining quality products and services for our customers. The major changes are in requiring the district to document through the QMP and associated quality control and quality assurance plans how they will assure quality. The major change in assuring quality has been at the MSC where it is now their responsibility to assure that their districts are delivering the quality services and products that the customer wants. They must develop a QMP detailing how they will accomplish these responsibilities.

POC: TERRY WILFORD, CEMP-EC, 202-761-8652

Return to Index of Articles

STREAMGAGING REPORT

Two interesting reports on streamgaging are available for reading on the Internet at http://water.usgs.gov/osw/pubs.html. The titles are "A New Evaluation of the USGS Streamgaging Network" and "Hydrologic Hazards Science in the U.S. Geological Survey." The first was written by the USGS in response to a Congressional subcommittee, and the second written by the National Research Council, Water and Science Technology Board, Committee on the USGS Water Resources Research. These reports address issues of concern to the Corps and other agencies who use streamgaging information. ASA(CW) recommends Corps offices be aware of this useful information. POC: DAVID WINGERD, CECW-EH, 202-761-8502

Return to Index of Articles

PROFESSIONAL REGISTRATION OF ARCHITECT-ENGINEER PERSONNEL

This article addresses a frequently asked question about the registration requirements for architect-engineer contractors. Federal Acquisition Regulation clause 52.236-25, Requirements for Registration of Designers, is required in all architect-engineer contracts except for overseas work. This clause requires that design work be performed or reviewed and approved by architects or engineers registered in the appropriate professional fields. This clause is an essential quality control and assurance mechanism. The architects and engineers can be registered in any state or possession of the United States, in Puerto Rico, or in the District of Columbia. They do not have to be registered in the state where the project is located.

ER 1110-1-8152, Professional Registration, paragraph 9, provides important guidance on state requirements for professional licensing. Under the doctrine of Federal Supremacy, Federal agencies are generally not required to comply with state registration requirements. In six environmental statutes listed in the ER, Congress has specifically waived Federal Supremacy regarding state permits and certifications, but not registration. Hence, we must submit permit applications, certifications and designs for such projects to states for review and approval, but the engineers and architects do not have to be registered in the state where the project is located. However, in the spirit of cooperation with state regulators, we should still seek to have the work approved by professionals registered in the appropriate state to the maximum extent possible, without unduly compromising Federal Supremacy or unduly restricting competition in A-E selections. As always, consult with your counsel if you have questions in this area.

Return to Index of Articles

POC: DON EVICK, CEMP-EC, 202-761-1053

CIVIL WORKS GUIDANCE PUBLICATIONS

Our policy and guidance for Civil Works engineering and construction is distributed primarily through ER's and EM's, along with some other types of publications. These are our tools to:

Ensure reasonable uniformity among districts

Establish requirements for engineering and construction processes

Provide standards for project safety, function and cost effectiveness

Transfer technologies from industry and our R&D programs

Manage our corporate knowledge for engineering and construction

Uniformity among districts helps USACE behave as a corporate body rather than 40 fully independent offices. It permits more efficient sharing of work, which is likely to increase under our *One Door to the Corps* concept, and as we attempt to maintain our core in-house competencies throughout the organization. Technology transfer helps districts gain easier access to those developments in the engineering profession that can have a significant impact on design, construction and evaluation of our projects. The knowledge management feature of our guidance is our corporate *Lessons Learned* system. The critical knowledge gained by each of you in executing your work should be captured and incorporated in our guidance for the benefit of the entire organization.

The Guidance Maintenance Program has been our headquarters process to manage and update these publications. Over the last several years we have been consolidating the set of publications by combining related information and by rescinding obsolete publications. While there used to be over 400 guidance publications, there are now only about 260 for which CECW-E is the proponent. We plan to continue our efforts for consolidation, by combining related ERs and by moving information from ETL's into appropriate EM's. Consolidation of this information will make requirements easier to find and understand.

Another significant change is in the works and will be included in ER 1110-2-1150, which is currently being revised. There has been an inconsistent view within some parts of USACE about what, if anything, is mandatory in our publications. For example, all engineers have not viewed even our minimum safety factors as a mandatory standard. The revised ER will explain the use of mandatory and other information in our guidance publications. Also, as we revise EM's in the future, each manual will specifically identify each mandatory requirement. Since there are always unique situations, mandatory requirements may not be appropriate for all projects. Therefore, the revised ER will also describe waiver authorities for these requirements. We hope these changes will better serve our corporate needs and will clarify the intent of much of our guidance.

POC: JOE HARTMAN, CECW-ET, 202-761-0291

Return to Index of Articles

VALUE ENGINEERING STUDIES PROVIDE SAFER ALTERNATIVES TO DISPOSAL

Administrative Judge, Peter Bloch, Atomic Safety and Licensing Board Panel, Nuclear Regulatory Commission (NRC) has ruled that an NRC license amendment granted to a Corps subcontractor to recycle FUSRAP 11-e-2 material was appropriate for disposal. The state of Utah had challenged the amendment in December 1998. This ruling sets a precedent, which strengthens the Corps recycling initiative, and helps ensure future competition on this program. The Judge quoted New York District and Buffalo District Value Engineering Proposals as partial justification for his ruling. He noted that recycling prevents valuable uranium from being sent to a disposal facility and being lost forever, and reduces the long-term environmental risk. This endorsement exhibits excellent work by both Districts, to show the Administration and Congress, how the Corps performs inherently governmental functions for U.S. Taxpayers. The methodology always works. Compliance with VE policy is smart.

POC: MICHAEL HOLT, CEMP-EV, 202-761-8738

PRIVATE SECTOR CONTRACTING

The Director of Civil Works has eliminated Civil Works Private Sector Contracting for planning, engineering and design, and construction phase services from the Command Management Review (CMR). Performance over the last two years coupled with the size of the Civil Works program for Fiscal Years 1999 and 2000 indicate that contracting must continue at a level of over 40% in order for the overall program to be executed. The elimination of private sector contracting from the CMR also eliminates the previous Division contracting targets. The only monitoring that will be done by HQUSACE will be a summary check of the Cost of Doing Business report to insure that all Divisions are doing their fair share of contracting. This CMR indicator was eliminated to reduce administrative burden on the Districts.

POC: CHARLES PEARRE, CECW-EP, 202-761-4531

Return to Index of Articles

AUGMENTING S&A STAFF

Districts often find it economical and effective to augment their in-house S&A staff with contracted architect-engineer (A-E) or construction management (CM) services. Contracted services can be turned on and turned off relatively quickly to provide either peak or specialized S&A services that are not inherently governmental. (See Construction Bulletin 98-7 for further information.) In order to make the A-E or CM services more responsive to the field construction manager, the area or resident engineer can be appointed by the contracting officer (KO) as the Contracting Officer's Representative (COR) for the contract or task order.

As COR, the field construction manager can communicate more directly and effectively with the A-E or CM firm, within the scope of the contract or task order as issued by the KO. Also as COR, the field construction manager will accept the services and certify the firm's payment invoices - activities which again help focus the S&A support contractor on the construction manager's needs.

If you think that the COR idea has merit, discuss it with your KO. It could make your S&A business process more efficient, effective and customer satisfying!

POC: DON EVICK, CEMP-EC, 202-761-1053

Return to Index of Articles



CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

We have been teaching "Construction Quality Management for Contractors" for the last five years. The contract clause which requires the contractor to take this training is CEGS-01451. The certificates issued to the first contractor personnel to take the training will be expiring soon. They have a five year, from date of training, expiration date. It is time to think about updating this training and we would like the fields input as to what changes should be made to make this training as effective as possible. You folks in the field see the effects of this training. Has it improved the contractor's performance of his quality control duties? Does the basic course need major changes? What type? Would it be acceptable to have a different, refresher type, course for contractors who have to retake the training due to expiration of their certificate? Mr. Wilford, CEMP-EC is the individual responsible for this training and he would like your input by e-mail.

MECHANICAL SYSTEMS COMMISSIONING

Mechanical systems commissioning performed in new construction and existing buildings helps to ensure that systems are installed, functionally tested, and capable of being operated and maintained to perform in conformity with the design intent and the customers needs. The process is commonly defined as one of testing system performance and correcting identified problems to ensure that a new building begins its life cycle at optimal productivity. Commissioning can also restore an existing building to optimal operation. Further, when commissioning is repeated periodically throughout the life of a building, it improves the likelihood that the building will maintain a high level of performance.

Our customers recognition of the benefits of commissioning can be gauged by their growing attendance in Huntsville Training course 327, Mechanical Systems Commissioning, and interest in requesting onsite training and commissioning of existing facilities. To fill the need for onsite training and commissioning of existing facilities, Huntsville is offering for FY 2000 a new course #445 entitled "Mechanical Systems Commissioning Workshop". The workshop will provide practical onsite procedures for the commissioning or re-commissioning of building mechanical systems. This workshop will train the student in additional procedures for commissioning building HVAC systems and provide the customer with a facility that is operationally and functionally ready. Despite much interest in commissioning it remains mandatory only in Air Force designs and recommended only for the more complex Army designs.

Huntsville's present course 327 is 36 hours divided between lab and classroom and taught once a year in Phoenix, Arizona. There are two days of lecture to prepare the student for the hands-on lab. The lab is two days long and taught at an AABC certified contractors facility. Each day is further divided into four work stations giving the student training in commissioning of heating, chilled water, cooling towers, air side, controls, plumbing, indoor air quality and fire protection systems. The course is designed to teach the skills necessary to implement the requirements of CEGS 15995. For further information on either course 327 or the workshop contact Janine Wright at (256) 895-7455 or Gary Bauer at (202) 761-0205.

Return to Index of Articles

ENGINEERING AND DESIGN QUALITY MANAGEMENT COURSE

We have a very effective three-day PROSPECT course on Engineering and Design Quality Management (course number 208). The course provides a comprehensive overview of the engineering and design process for military and civil works projects. It examines how quality is achieved throughout the various phases of a project (planning, predesign, design and construction), and covers performance by both in-house personnel and architect-engineer firms. The course also discusses how quality is measured and how a quality management system is implemented in a district. The course instructors come from a representative cross section of Corps districts, including Louisville and Portland which are ISO 9001-certified.

We encourage managers and supervisors to include this course in the Individual Development Plans of their personnel and request quotas in the forthcoming annual PROSPECT survey. It is very appropriate for a broad range of grades and disciplines. If there is sufficient demand for this training at a district, an on-site session can be arranged which will be much more economical than a regularly scheduled session. Contact Don Evick, the course proponent, if you are interested in more information on the course or in setting up an on-site session.

POC: DON EVICK, CEMP-EC, 202-761-1053.

CP-18 LEADERSHIP DEVELOPMENT PROGRAM

The CP -18 Leadership Development Program (LDP), which replaces the CP-18 Executive Development Program, is designed to produce a diverse, high potential pool of careerists who will respond to the needs of the U.S. Army during the 21st century. The LDP focuses on professional development for mid-level CP-18 registrants at the GS 12/13 levels. The LDP is a three year program comprised of three parts: formal mentoring, classroom training, and a six month development assignment. The purpose of the development assignment is to provide LDP candidates with an opportunity for career broadening, to help them become competitive for promotions, to enhance their performance in their existing positions, to help them develop a corporate view of the Corps and to support the mission of the office they are assigned to.

Mr. Jeff Hooghouse, Directorate of Military Programs (DMP), is enrolled in the LDP. For his developmental assignment, Mr. Hooghouse has been assigned to Nashville District to the Engineering and Planning Division, Planning Branch. Mr. David Strain from Mobile District's Project Management Office has been assigned to HQUSACE to backfill Mr. Hooghouse's position in DMP, E&C Division, Technical Branch.

POC: Al Young, CEMP-ET, 202-761-0435

Return to Index of Articles

Meetings and Conferences

JOINT ENVIRONMENTAL, ENGINEERING, AND CONSTRUCTION CONFERENCE

One of the unique attributes of this year's annual Construction Conference was that it brought together not only the construction folks, but also a very divergent group of people throughout the Corps with varied and diverse professional backgrounds. In fact, this first ever-Joint Conference of Environmental, Engineering, and Construction leaders and technical experts represented a unique forum for presentations and discussions on all the current topics within their respective fields. The conference was held in St. Louis, Missouri from 22 - 26 March 1999, and was graciously hosted by the Commander, St. Louis District, Col Thomas Hodgini.

Once again we were fortunate to have MG Al Genetti, Deputy Chief of Engineers deliver the keynote address. MG Genetti applauded this cross functional gathering of Corps team members and talked about the many changes occurring throughout USACE to implement the Corps Plus Strategy to all our business processes. He focussed on the overall Corps programs, and Current Directions within USACE. Some of the hot HQ issues he discussed included the following:

VISION MASTER STRATEGY STRATEGIC PLANNING PROCESS CORE COMPETENCIES PART OF THE ARMY STAYING IN OUR LANE RIGHT SIZING PM REINVENTION REGIONAL BUSINESS CENTERS

The Deputy Commander closed by challenging everyone to make sure that they embrace the changes that are on going throughout the organization and help make them a SUCCESS!

Following this outstanding presentation by the Deputy Commander, Mr. William Brown, Deputy Director of Military Programs discussed the many new initiatives on going within the Headquarters and the Corps that are changing and improving USACE. One new program that Mr.

JOINT ENVIRONMENTAL, ENGINEERING, AND CONSTRUCTION CONFERENCE (CONTINUED)

Brown highlighted was the new Leadership Development Program that will expose emerging leaders to new opportunities in different parts of the USACE organization and will provide new training opportunities for each participant to grow their careers.

Mr. Dwight Beranek and Mr. Carl Enson, as well as Ms. Patricia Rivers, Chief, Environmental Division, the Key Leaders and Proponents for this joint conference concluded the morning session with presentations covering a global overview of each of their respective Divisions and some of the key issues and future challenges which the Corps must address in coming years.

At the Awards Luncheon, MG Genetti made the presentations to each of the Hard Hat and Construction Management Excellence Award winners and heartily congratulated each of the recipients for their hard work and outstanding accomplishments. The award recipients were as follows:

USACE HARD HAT OF THE YEAR AWARDS

This was the Corps' twelfth presentation of its Prestigious USACE Hard Hat of the Year Award. Established in 1987, this award recognizes the most outstanding field employee responsible for managing quality of construction in each Corps Division.

Joseph H. Pike Great Lakes and Ohio River Division

Eric Johnson Mississippi Valley Division
Brett Gorham North Atlantic Division
Jesse W. Vance Northwestern Division
Mehdi Mizani Pacific Ocean Division
Dennis G. Imborek South Atlantic Division
John L. Sisley South Pacific Division
James E. Snyder Southwestern Division

USACE AWARD FOR CONSTRUCTION MANAGEMENT EXCELLENCE

This was the Corps' sixth presentation of its USACE Award for Construction Management Excellence. Established in 1993, this award recognizes construction personnel exhibiting excellence in construction management and contract administration activities.

Thomas W. O'Bryan Great Lakes and Ohio River Division

Jesse S. Marshall
Buddy L. Billington, II
Terry R. Childers
Michael L. Redmond
David R. Tolle
Terence M. King
Daniel E. Clemans
Mississippi Valley Division
North Atlantic Division
Pacific Ocean Division
South Atlantic Division
South Pacific Division
Southwestern Division

We congratulate all the winners this year and hope that they continue to lead by example with their outstanding performance in their respective Divisions

Electronic versions of the conference topics and presentation materials from some of the session have been placed on the Construction & Design Branch website for your use as appropriate, http://www.hq.usace.army.mil/cemp/c/cemp-c.htm.

POC: Mr. Walt Norko, CEMP-EC, 202-761-1265

JOINT ENVIRONMENTAL, ENGINEERING AND CONSTRUCTION CONFERENCE

Representing the "Engineering community" at the Joint Environmental, Engineering and Construction Conference were approximately 80 Corps architects, landscape architects, and interior designers. Because the last conference held for these design disciplines was six years ago, this conference was very welcomed. The plenary session with presentations by senior leadership and the joint engineering and construction sessions were well received. The individual breakout sessions by the architects, landscape architects and interior designers focused on design technology, virtual design teams, partnering, web-based resources, career and professional development. Of major significance was the announcement of the establishment of the *Chief Architect of the U.S. Army Corps of Engineers* position in HQUSACE, Directorate of Military Programs, Engineering and Construction Division. Mr. Larry Delaney, R.A., AIA, was named to this position. The Engineering portion of the conference also included a filed trip to the Melvin Price Locks and Dam.

POC: AL YOUNG, CEMP-ET, 202-761-0435

Return to Index of Articles

"Kitchen Cabinet" Meeting

In December Mr. Beranek, and Mr. Enson, requested that Dr. Ed Middleton, the chair of the Corps Senior Advisory CADD (SAC) Group, bring together a group of Chiefs of Engineering from various districts in an informal meeting to discuss issues and concerns from the field. The first meeting of this "kitchen cabinet" group with HOUSACE personnel was held 17 March in Washington, DC, at the Washington Park Hotel. In addition to Mr. Beranek, Mr. Enson, and Dr. Middleton, CESAJ, those attending the meeting were Phillip O'Dell, CENWS, Eugene Tickener, CEMVN, Joseph Rogers, CESAS, Paul Robinson, CELRD, Lloyd Caldwell, CENAB, and Carl Postlewate, CESAD as well as other HQUSACE personnel from CEMP-E and CECW-E. This informal meeting was designed to assure that Headquarters and the Field stay connected and have a sound relationship. Discussions revolved around critical issues, and major issues that are facing engineering in the Corps. Some major issues discussed were the need for Engineering Excellence and professionalism in Engineering and Construction divisions, and the need to determine what core competencies will be required in each district in the future. Some of the concerns expressed by the Field were related to new policies from HQ related to Engineering During Construction (EDC), electronic commerce, and intern selection. There was general agreement of the need for more coordination with the field prior to issuing policies from headquarters that impact the business process and the cost of doing business. All participants were gratified by the results of the meeting. Future meetings will be scheduled as the need arises. Return to Index of Articles

Paranering

USACE-MAPPS PARTNERING MEETING

On 10 Mar 99, representatives from Civil Works, Military Programs, and Resource Management Directorates met with the Board of Directors, President, and Executive Director of the Management Association of Private Photogrammetric Surveyors (MAPPS). MAPPS is an industry trade association representing some 125-150 firms that provide surveying, mapping, photogrammetry, and related GIS services. A variety of issues were discussed, including: bidding of subcontracted surveying and mapping services, "bundling" of surveying and mapping services within large A-E contracts, and a declining Corps-wide technical expertise in photogrammetric mapping work. Also discussed were regional or Corps-wide technical centers of expertise for photogrammetric mapping, the proposed

USACE-MAPPS PARTNERING MEETING (CONTINUED)

revision to FAR/DFARS Part 36 definition of surveying and mapping services, Corps implementation of Federal Activities Inventory Reform (FAIR) Act, procedures for private individuals to take Corps PROSPECT training courses, and MAPPS support to FY 00 Tri-Service CADD/GIS Conference.

POC: BILL BERGEN, CECW-EP, 202-761-1553

RETURN TO INDEX OF ARTICLES

MEETING WITH ASSOCIATION OF STATE GEOLOGISTS

Mr. Mike Klosterman, CECW-EG, hosted a meeting with the Association of State Geologists on 16 March. Mr. Ted Rugiel, CECW-OR, and Ms. Cheryl Smith, CECW-PD, were present along with State Geologists from several states. Issues of mutual interest that were discussed included: (1) reauthorization of the National Cooperative Geologic Mapping Act and associated matching funds that could be used to help solve mutual problems, (2) the Corps development of a policy guidance letter on reclamation of Abandoned Mine Lands (AML's) which addresses safety issues, (3) recent court decisions favoring the Fish & Wildlife interpretation of the Corps Section 404 process in relation to the Endangered Species Act, and (4) the Corps interpretation of Section 404 permits to regulate Mine Tailings Valley Fills.

POC: MIKE KLOSTERMAN, CECW-EG, 202-761-8682